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QUERY CONTROL FORM				RTIS USE ONLY	
Application No.	10/678,851	Prepared by	ewc	Tracking Number	05914996
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JACKET			
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449
b. Applicant(s)	g. Disclaimer	l. Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other

SPECIFICATION

a. Page Missing
b. Text Continuity
c. Holes through Data
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e. Illegible Text
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g. Brief Description
h. Sequence Listing
i. Appendix
j. Amendments
k. Other

CLAIMS

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b. Improper Dependency
c. Duplicate Numbers
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4/21/04

E-5 (Rev. 10/01/02)

10/678,857

CONTAINER STRENGTHENING SYSTEM

CROSS-REFERENCE TO RELATED APPLICATION

The present application is a continuation of co-pending U.S. Patent Application Serial No. 10/329,168 filed 12/24/02, now Patent No. 6,659,144, which is a continuation of Serial No. 10/081,638, filed 02/21/02, now Patent No. 6,505,656, which is a continuation of Serial No. 09/812,640, filed 03/20/01, now Patent No. 6,378,571 for CONTAINER STRENGTHENING SYSTEM of Robert H. Schultz et al., which is hereby specifically incorporated by reference for all that is disclosed therein.

FIELD OF THE INVENTION

The present invention relates generally to container strengthening systems, and, in particular, to liquefied gas injection systems used to strengthen containers.

BACKGROUND OF THE INVENTION

Carbonated beverages, such as soft drinks and beer, are commonly packaged in metallic containers such as aluminum cans. The carbonation within the beverage exerts pressure on the containers, thereby increasing the strength of the container walls. However, it is generally desirable to further strengthen the containers in order to decrease the likelihood of damage to the containers as well as minimize the necessary thickness of the container walls.

One method used for strengthening containers is to deposit a liquefied gas such as nitrogen onto the beverage immediately prior to sealing the container. After sealing, the evaporated liquefied gas creates pressure within the container and also displaces oxygen from the headspace, thereby helping to prevent spoilage of the beverage. Many devices used to accomplish this result simply lay the liquefied gas onto the surface of the beverage, rather than forcibly injecting the liquefied gas into the beverage. This may suffice for non-carbonated beverages as well as some carbonated beverages. However, with a carbonated beverage such as beer that tends